WYC:lmp 6/1/05 P0329L

PATENT

AFB
IPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Geoffrey B. Rhoads

Application No.: 09/804,679

Filed: March 12, 2001

For: MEDIA COMMERCE SYSTEM EMPLOYING WATERMARKS

Examiner: U. Raman

Date: June 1, 2005

Art Unit 2616

Confirmation No. 1863

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on June 1, 2005 as First Class Mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450.

William Y. Conwell
Attorney for Applicant

TRANSMITTAL LETTER

MAIL STOP APPEAL BRIEF – PATENTS
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Enclosed for filing in the above-captioned matter are the following:

☒ Appeal Brief (fee **$500.00)**

☒ If any extension of time is required, please consider this a petition therefor.

☒ Please charge **$500.00** (fee for Appeal Brief) and any additional fees which may be required in connection with filing this document and any extension of time fee, or credit any overpayment, to Deposit Account No. 50-3284.

Respectfully submitted,

Date: June 1, 2005

DIGIMARC CORPORATION

CUSTOMER NUMBER 23735

By_____
William Y. Conwell
Registration No. 31,943

Phone: 503-469-4800
FAX 503-469-4777

WYC:lmp P0329L 6/1/05

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Geoffrey B. Rhoads
Application No.: 09/804,679
Filed: March 12, 2001
For: MEDIA COMMERCE SYSTEM EMPLOYING WATERMARKS
Examiner: U. Raman
Date: June 1, 2005

Art Unit 2616

Confirmation No. 1863

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on June 1, 2005 as First Class Mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450.

William Y. Conwell
Attorney for Applicant

APPEAL BRIEF

Mail Stop: Appeal Brief – Patents
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Sir,

This brief is in furtherance of the Notice of Appeal filed April 6, 2005. Please charge the fee required under 37 CFR 1.17(f), and any other fee or deficiency, to deposit account 50-3284 (see transmittal letter).

06/06/2005 MAHMED1 00000044 503284 09804679
01 FC:1402 500.00 DA

I. REAL PARTY IN INTEREST

The real party in interest is Digimarc Corporation, by an assignment from the inventors, recorded at Reel 12023, Frames 185-186, on July 24, 2001.

II. RELATED APPEALS AND INTERFERENCES

An appeal (2005-0092) was filed in the parent application (09/337,590), and the rejection of the Examiner was affirmed. Claims 1-5 of the present application were originally filed in the parent, but were restricted-out as drawn to distinct inventions. (Claims 6-9 of the present application were not originally filed in the parent, but depend from the originally-filed claims.)

III. STATUS OF CLAIMS

Claims 1-9 are finally rejected and appealed.

IV. STATUS OF AMENDMENTS

All earlier-filed amendments have been entered.

V. BACKGROUND AND SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to methods for internet distribution of video.

The independent claim, on which all the claims are based, defines a method that includes displaying a listing of video titles,[1] and receiving a signal indicative of a video title selected by the user.[2] A fee is then exchanged. Following the successful fee exchange, the video is watermarked on-the-fly,[3] and transmitted to the consumer.[4]

The fee exchange is an important aspect of the claimed arrangement. In the embodiment described in the specification, the user is a presented a menu with different video selections, and their corresponding fees.[5] When the user selects a desired video clip, a further screen appears through which payment of the corresponding fee is effected.[6]

In the detailed arrangement, payment of the fee is effected by "tokens" (*e.g.*, 128 bit random number strings) that are purchased by users (*e.g.*, at banks)[7] and redeemed by the video provider (*e.g.*, at a bank).[8] Only after the video provider receives confirmation (*e.g.*, from the bank) that the tokens have been validated, and the corresponding cash funds have been credited to the provider's bank account, is the video delivery commenced.[9] This transaction is detailed in the specification as follows:

> *On clicking on a hypertext link associated with the desired basketball game, the viewer is presented a further screen with one or more options. The first of the listed options is the entire game, with commercials. The charge is the nominal charge presented on the earlier screen (i.e. 80 cents). Other options may include the first, second, third, and fourth quarters of the game individually, each of which – save the last, costs 20 cents. The last may be charged at a premium rate, e.g., 30 cents. Clicking on the desired video option yields a further screen through which payment is effected.*
>
> *To pay for the requested video, the consumer instructs his or her computer to transfer three of the earlier-purchased tokens over the web to the video provider. Various user interface metaphors can be employed to facilitate this transfer, e.g., permitting the user to type the amount of money to be transferred in a dialog box*

---

1 *See, e.g.*, specification, page 3, lines 5-7.
2 *See, e.g.*, specification, page 3, lines 9-10, 14-15.
3 *See, e.g.*, specification, page 4, lines 19-23.
4 *See, e.g.*, specification, page 4, line 19.
5 *See, e.g.*, specification, page 3, lines 9-15.
6 *See, e.g.*, specification, page 3, line 15.
7 *See, e.g.*, specification, page 2, lines 10-24.
8 *See, e.g.*, specification, page 4, lines 8-18.
9 *See, e.g.*, specification, page 4, line 19.

presented on-screen, or dropping/dragging icons representing tokens (coins) from an on-screen "wallet" to an on-screen "ticket booth" (or over an icon or thumbnail representing the desired content), clicking on an "increment" counter displayed adjacent the listing of the content, etc. Once the consumer has authorized a transfer of sufficient tokens, the consumer's computer sends to the web site (or to such other web address as HTML encoding in the viewed web page may indicate) the tokens. This transmission simply takes the form of the three 128+ bit numbers (the '+' indicating the bank identifier) – in whatever packet or other format may be used by the internet link. Once dispatched in this manner, the tokens are deleted from the user's computer, or simply marked as spent. (Of course, in other embodiments, a record of the expenditure may be stored in the consumer's computer, e.g., with the token contents and a record of the audio or video purchase to which they were applied.)

Since the amount of money is nominal, no encryption is provided in this embodiment, although encryption can naturally be provided in other embodiments (e.g., either in sending the tokens from the user to the web site, or earlier, in sending the tokens to the user). As will be seen, provided that the media provider immediately sends the tokens to the bank in real time, encryption is a nice feature but not mandatory

On receipt of the token data, the web site immediately routes the token data to the identified bank, together with an identifier of the media provider or account to which the funds represented thereby are to be credited. The bank checks whether the 128-bit numbers have been issued by that bank, and whether they have already been spent. If the numbers are valid, the bank updates its disk-based records to indicate that the three tokens have been spent and that the bank now owes the media supplier 30 cents, which it may either pay immediately (e.g., by crediting to an account identified by the media provider) or as one lump sum at the end of the month. The bank then sends a message to the web site confirming that the tokens were valid and credited to the requested account. (Optionally, a message can be sent to the purchaser of the tokens (if known), reporting that the tokens have been redeemed.)

In response, the web site begins delivery of the requested video to the consumer.[10]

The claimed arrangements each requires that the video be watermarked on-the-fly prior to its delivery. Watermarking, as is known to artisans, refers to technologies by which information can be covertly conveyed - hidden in other carriers, such as movies. The specification contemplates that watermark information conveyed by a video can comprise a date identifier; an identifier of an internet site from which the selected video is provided; an identifier of the consumer to whom the video is to be transmitted; and/or an identifier of an internet address to which the selected video is transmitted.[11]

---

[10] Specification, page 3, line 9 – page 4, line 19.

[11] Specification, age 4, lines 19-25.

VI. GROUNDS OF REJECTION

Claims 1-2 and 8 stand rejected as allegedly anticipated by Kenner (5,956,716).

Claims 3-4, 7 and 9 stand rejected as allegedly unpatentable over Kenner in view of Moskowitz (5,822,432).

Claim 6 stands rejected as allegedly unpatentable over Kenner in view of Fridrich (6,101,602).

Claim 5 stands rejected as allegedly unpatentable over Kenner in view of Moskowitz and Fridrich.

VII. ARGUMENT

1. Claim 1 (§ 102: Kenner)

Claim 1 reads as follows:

> *1. A method for internet distribution of video comprising:*
> *displaying to a consumer a listing of video titles;*
> *receiving a signal indicative of a video title selected by the user;*
> *exchanging a fee;*
> *watermarking the video on-the-fly; and*
> *transmitting the video to the consumer.*

The Examiner contends that each of the claim's limitations is taught by Kenner.

Kenner discloses an internet video delivery system that clearly has some similarities to the claimed arrangement (as would most such video delivery methods). For example, Kenner presents a selection of videos to the user, and receives back a signal indicative of a selected video title. However, Kenner's arrangement then diverges from applicant's claimed combination.

In Kenner's arrangement, charges for the video delivery are accrued and later billed (*e.g.*, monthly).

Kenner notes, and then solves, a problem with this accrued billing approach:

> *A mechanism is built into the invention to avoid abuse of the "pay per view" billing system. With a pay per view system, there is a potential for a user to over-use the system, accruing an unreasonably high level of charges. Consequently, the user or another person can pre-program the browser extension 84 to enforce a cost limit; this cost limit would be password protected. Prior to downloading a file, the PIM 64 communicates the total potential cost to the browser extension 84. If the total charge exceeds the player's limit, then the download is disallowed, or the user is asked to confirm the transaction by entering the password.*[12]

Applicant's claimed methods avoid this problem in a different way. Rather than permitting charges to accrue, and checking that a cost limit is not exceeded, applicant's claimed methods call for actually "*exchanging a fee*" before transmitting the video to the consumer. No "unreasonably high level of charges" can be accrued in applicant's claimed arrangement because each video clip is paid for prior to its delivery. No accrual and later billing - as taught by Kenner - is involved.

Kenner's teaching of "billing" (i.e., accruing charges for later settlement) does not anticipate the "exchanging a fee" language of applicant's claims.

To illustrate that Kenner's billing is an arrangement in which charges are accrued for later settlement, see the following passages:

- Col. 24, lines 47-50, which notes that the PIM (Kenner's central database, the "primary index manager") tracks "accrued charges;" [13]
- Col. 33, lines 42-45, which notes that the user sign-up process involves querying the user "as to price limits for monthly charges."
- Col. 22, line 4, which notes that the PIM database stores "Maximum Charge" data, described as "The maximum monthly expense that can be incurred by the account;"

---

[12] Kenner, 5,956,716, col. 34, lines 5-14.

[13] "*As previously indicated, the PIM 64 also has a user database which stores information on each of its users, namely subscription rights, authorized rating levels,* ***accrued charges****, charge limits, etc.*"

- Col. 24, lines 56-58, describes that, in responding to a request to provide a video, Kenner's system checks "to determine if downloading the desired clip will cause the user to exceed his charge limit."
- Col. 33, line 65 – col. 34, line 2, explains the "pay per view" mode of operation, in which "the user's account accrued an incremental charge on the basis of the download or viewing."

When presented with such distinction, the Examiner responded as follows:

> *Applicant argues that the reference fails to show certain features of applicant's invention. However, Kenner discloses* [*sic* – delivers?] *the desired clip* only if the user has not gone over his charge limits *(see column 24, lines 50-57). Thus, a fee must be exchanged before the clip is downloaded or transmitted. As a result, applicant's arguments are not persuasive.*

Contrary to the Examiner's assertion, it is not required that "a fee must be exchanged" before a clip is downloaded.

Kenner's arrangement clearly contemplates that videos can be downloaded before any fee is paid (*i.e.*, a fee is accrued, but not immediately paid). Eventually, of course, the provider must be paid. But payment for a video title in advance of its delivery – as set forth in the claim – is not taught by Kenner. (Even in the exceptional case of a user who has gone over his charge limit, Kenner details two options: (1) to not watch the movie; or (2) enter a password to override the limit. Payment of charges accrued to date is not mentioned as an option. Indeed, waiting for a monthly billing, and settling the outstanding charge, would doubtless cause the consumer's selection of a desired title to "time-out.")

Because Kenner fails to teach the arrangement claimed, the anticipation rejection of claim 1 should be reversed.

2. Claims 2 and 8 (§ 102: Kenner)

Claims 2 and 8 stand or fall with claim 1, from which they depend.

3. Claim 3 (§ 103: Kenner + Moskowitz)

Claim 3 depends from claim 2, and is similarly allowable. Moreover, claim 3 is also independently patentable. Claims 2 and 3 read:

> *2. The method of claim 1 in which the watermarking includes watermarking the video with at least one data from the list comprising: an identifier of the date, an identifier of an internet site from which the selected video is provided, an identifier of the consumer, and an identifier of an internet address to which the selected video is transmitted.*
>
> *3. The method of claim 2 which includes watermarking the video with at least two data from said list.*

The Action correctly notes that Kenner does not teach the limitation of claim 3, but cites Moskowitz to redress this shortcoming. However, as revealed by the Examiner's own explanation, Moskowitz does not teach this limitation either.

The Examiner explained:

> *Moskowitz et al discloses watermarking media contents with a plurality of data, including "metering" watermarks on contents that identify the consumer, license agreement and terms of usage, watermarks containing other pertinent information about the content, such as where to locate other copies of the purchased content or similar contents, can be included in the content. An example of such information watermarked is watermarking the video content with one or more URLs. Note column 9, lines 29-40 in Moskowitz et al.*

It will be recognized that this explanation does not demonstrate that Moskowitz teaches watermarking the video "with at least two data from the list" as required by the claim.

Moskowitz teaches <u>one</u> data from the list: "an identifier of the consumer." And he suggests various data <u>not</u> on the list. But he teaches <u>none</u> of the other three listed data (*i.e.*, an identifier of the date, an identifier of an internet site from which the selected video is provided, and an identifier of an internet address to which the selected video is transmitted).

A watermark that identifies the "license agreement and terms of usage" meets none of the three remaining claim alternatives.

Likewise a watermark containing information about "where to locate other copies of the purchased content or similar content" meets none of the claim alternatives.

It will be recognized that the URL cited at Moskowitz col. 9, lines 29-40, does not meet any of the claim requirements. This passage identifies web sites where "similar content that a buyer of a piece of content might be interested in can be found." But such a URL does not identify the web site of "an internet site from which the selected video *is* provided." Nor does such a URL identify "an internet address to which the selected video *is* transmitted."

Since Moskowitz fails to teach the claim limitation for which it has been cited, the Final Action fails to establish *prima facie* obviousness, and the rejection should thus be reversed.

4. Claim 4 (§ 103: Kenner + Moskowitz)

Claim 4 depends from claim 2, and is similarly allowable. Moreover, claim 4 is also independently patentable. Claims 2 and 4 read:

> *2. The method of claim 1 in which the watermarking includes watermarking the video with at least one data from the list comprising: an identifier of the date, an identifier of an internet site from which the selected video is provided, an identifier of the consumer, and an identifier of an internet address to which the selected video is transmitted.*
>
> *4. The method of claim 2 which includes watermarking the video with at least three data from said list.*

As demonstrated above in connection with claim 3, Moskowitz teaches only one of the four watermark data specified in claim 2. Claim 4, in contrast, requires the presence of three such data.

Since Moskowitz fails to teach any arrangement employing three of the listed data, *prima facie* obviousness has again not been established, and the rejection of claim 4 should again be reversed.

5. Claim 7 (§ 103: Kenner + Moskowitz)

Claim 7 depends from claim 2, and is similarly allowable. Moreover, claim 7 is also independently patentable. Claim 7 reads:

> *7. The method of claim 2 in which the watermarking includes watermarking with an identifier of an internet site from which the selected video is provided.*

As discussed above, Moskowitz suggests watermarking content with the URL for an online site "where similar content that the buyer of a piece of content might be interested in can be found."[14] The claim, in contrast, requires "an identifier of an internet site from which the selected video is provided." These are not the same.

Again, since the art fails to teach that for which it is cited, *prima facie* obviousness has not been established, and the rejection of claim 7 should be reversed.

6. Claim 9 (§ 103: Kenner + Moskowitz)

Claim 9 depends from claim 2, and is similarly allowable. Moreover, claim 9 is also independently patentable. Claim 7 reads:

> *9. The method of claim 2 in which the watermarking includes watermarking with an identifier of an internet address to which the selected video is transmitted.*

As discussed above, Moskowitz suggests watermarking content with the URL for an online site "where similar content that the buyer of a piece of content might be interested in can be found."[15] The claim, in contrast, requires "an identifier of an internet address to which the selected video is transmitted." Again, these are not the same.

Again, since the art fails to teach that for which it is cited, *prima facie* obviousness has not been established, and the rejection of claim 9 should be reversed.

---

[14] Moskowitz, 5,822,432, col. 9, lines 29-39.
[15] Moskowitz, 5,822,432, col. 9, lines 29-39.

7. Claim 6 (§ 103: Kenner + Fridrich)

Claim 6 depends from claim 2, and is similarly allowable. Moreover, claim 6 is also independently patentable. The claim reads:

> *6. The method of claim 2 in which the watermarking includes watermarking with an identifier of the date.*

Unlike the rejections just-discussed, Fridrich teaches the limitation introduced by this dependent claim.

However, applicant respectfully submits that the rationale offered to combine Kenner and Fridrich in the manner asserted, impermissibly draws from hindsight.

Unlike Kenner, Fridrich is not concerned with internet delivery of video. Rather, Fridrich is concerned with adding watermark data to imagery to permit its authentication.[16] That is, Fridrich wants a recipient of an image "to be able to confirm that the image came from the person who is alleged to have sent it, and not from someone trying to masquerade as that person."[17] Fridrich's incorporation of date data in the watermark helps the recipient confirm or rebut the authenticity of the image.

In explaining his proposed motivation leading to the combination of Fridrich with Kenner, the Examiner states:

> *It would have been obvious to one of ordinary skill to modify the system of Kenner in view of Fridrich's teaching by watermarking a media content with a date identifier. The motivation would be to provide means of identifying the date a purchase transaction was processed.*

Applicant submits that this rationale evidences hindsight reasoning. Neither reference suggests identifying the date a purchase transaction was processed. Fridrich employed date data for a different purpose – a clue to help the recipient determine whether an image is authentic. Extrapolation of Fridrich's teaching to the context claimed impermissibly draws from applicant's specification – not from the art.

Accordingly, applicant submits that *prima facie* obviousness has not been established as

---

[16] Fridrich, col. 4, line 63 – col. 5, line 3.

to claim 6, and request reversal of the rejection.

8. Claim 5 (§ 103: Kenner + Moskowitz + Fridrich)

Claim 5 depends from claim 2, and is similarly allowable. Moreover, claim 5 is also independently patentable. The claim reads:

> *5. The method of claim 2 which includes watermarking the video with all four data from said list.*

It will be recognized that each of the arguments offered above – including the detailed shortcomings of Moskowitz, and the hindsight application of Fridrich's teachings - all come to bear on claim 5.

Moskowitz fails to teach the limitations for which it is cited.

Fridrich is applied through impermissible hindsight.

Accordingly, applicant submits that *prima facie* obviousness has not been established, and thus request reversal of the rejection.

---

[17] Fridrich, col. 1, lines 24-26.

VIII. CONCLUSION

The anticipation rejections fail because the Kenner does not teach "exchanging a fee" prior to delivery of the watermarked video. The obviousness rejections fail because the Examiner failed to meet the Office's burden of establishing *prima facie* obviousness. Accordingly, the Board is requested to reverse the outstanding rejections, and remand to the Examiner for issuance of a notice of allowance.

Respectfully submitted,

Date: June 1, 2005

DIGIMARC CORPORATION

CUSTOMER NUMBER 23735

By_____

William Y. Conwell
Registration No. 31,943

Phone: 503-469-4800
FAX 503-469-4777

APPENDIX A

PENDING CLAIMS

1. A method for internet distribution of video comprising:
displaying to a consumer a listing of video titles;
receiving a signal indicative of a video title selected by the user;
exchanging a fee;
watermarking the video on-the-fly; and
transmitting the video to the consumer.

2. The method of claim 1 in which the watermarking includes watermarking the video with at least one data from the list comprising: an identifier of the date, an identifier of an internet site from which the selected video is provided, an identifier of the consumer, and an identifier of an internet address to which the selected video is transmitted.

3. The method of claim 2 which includes watermarking the video with at least two data from said list.

4. The method of claim 2 which includes watermarking the video with at least three data from said list.

5. The method of claim 2 which includes watermarking the video with all four data from said list.

6. The method of claim 2 in which the watermarking includes watermarking with an identifier of the date.

7. The method of claim 2 in which the watermarking includes watermarking with an identifier of an internet site from which the selected video is provided.

8. The method of claim 2 in which the watermarking includes watermarking with an identifier of the consumer.

9. The method of claim 2 in which the watermarking includes watermarking with an identifier of an internet address to which the selected video is transmitted.